

ROOT CAUSES

Systemic causes of problems within programs may be identified through root cause analysis. Root causes are listed below under the heading of management, resources, training, and plans and procedures.

MANAGEMENT

- Stormwater management lacks sufficient organizational stature independence and authority
- Stormwater planning is not afforded the same priority as other organizational functions
- Stormwater management does not participate at key strategic and operations planning meetings
- Authority is ineffective and/or inadequate
- Personnel concerns are not solicited, addressed or documented
- Response and/or cooperation is not effective within the organization
- The organization does not have a good working relationship with external agencies
- Federal, state, or local agency response and/or cooperation is inadequate
- Stormwater management responsibilities are not clearly defined for all activities and personnel
- Stormwater management responsibilities are not clearly defined in the job description
- Performance standards are not included in stormwater management responsibilities
- Personnel/activities are not held accountable for stormwater management performance

RESOURCES

- Stormwater management does not include both short-term and long-term programming for resources
- Funds for stormwater management related activities are not sufficient
- Staffing levels are not sufficient to achieve performance goals
- Strategic and long-term planning of projects with stormwater impacts are inadequate or do not exist
- Design is inadequate
- Best Management Practice is not established
- Best Management Practice is inadequate
- Best Management Practice is not current
- Best Management Practice is not effective or implemented properly
- Systems, facility, equipment, or part failure
- Supplies have been ordered but have not been received
- Control and oversight does not exist over purchased materials, equipment and services supporting the day-to-day operations
- Resources (including equipment and tools) are not adequate and/or sufficient
- Resources are not properly allocated (including tools, equipment, funding, and staff)

TRAINING

- Stormwater awareness training is not provided
- Personnel do not have the technical background and training to perform assigned job tasks.
- Inadequate training needs analysis
- The training program is not effective
- Training activities are not documented (i.e., not on file, incomplete, or not current)
- Periodic evaluations of the effectiveness of training programs are not conducted
- Periodic evaluations of the effectiveness of training programs are not documented
- Personnel are not trained on new regulations or policies

PLANS AND PROCEDURES

- Formal policies are not issued from the appropriate level
- Existing policies conflict with stormwater management initiatives
- Formal statements of goals and objectives do not exist or are inadequate
- Stormwater management requirements are not adequately considered when developing policies
- Stormwater management plans and/or procedures are not established
- Stormwater management plans and/or procedures are inadequate
- Stormwater management plans and/or procedures are not current
- System is not in place to properly coordinate the review and acceptance of new/updated plans/procedures with appropriate agencies
- Stormwater management plans and/or procedures are not effective and/or properly implemented
- Recordkeeping and reporting is ineffective and/or inadequate
- System is not in place to track new or changing regulations
- New regulatory requirements are not being incorporated into standard operating procedures (SOPs)
- Regulatory policy or requirement is misinterpreted
- Unclear or conflicting federal, state, county or local requirements
- A tracking system for key regulatory compliance deadlines does not exist or is inadequate
- A document control system and record retention procedures does not exist or is inadequate
- No formal mechanism exists to investigate, report, correct, track, or monitor stormwater management problems or incidents
- Assessments or inspections are not conducted by trained or qualified professionals
- Inadequate or conflicting guidance exists for conducting internal assessment/inspections
- Appropriate review and follow-up of self-assessments/inspections execution and results are not conducted